

ECONOMICS OF TOBACCO

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I — INTRODUCTION

The economics of tobacco is a wide subject that covers the processing of a major agricultural product and a major industrial output. Furthermore, tobacco is one of the basic five cash crops in the United States and it is a highly traded commodity in the world market. The economic relations that arise in the process of producing and distributing tobacco are further complicated by the health consequences of smoking and the sizable research that is involved in the study of these consequences in addition to the financial losses caused by the smoking related diseases and the production losses caused by cutting the life shorter because of its death ratio.

This paper will study one part only of this area of the economics of tobacco, namely, the cost of producing and manufacturing tobacco. This cost will be analyzed in terms of the amount of resources spent on tobacco with certain comparison with other commodities. This paper will also throw some light on the share of the Muslim world in the production and manufacturing of this commodity. At last, it will discuss the morals of commercializing this commodity from an Islamic point of view. This last discussion will indulge the paper in the price theory in the Islamic economy on the microeconomic level and its macroeconomic implications.

II—TOBACCO: A HISTORICAL BACKGROUND

According to the *International Encyclopedia of Social Sciences*, tobacco was first used by the American Indians. It was introduced to the old world by Columbus.¹ Although many attempts to hold its spread and to eliminate its use were done by the authorities in all the European and Muslim countries,² tobacco smoking was increasingly spreading throughout the world during the five centuries since the Europeans reached America.

In the mid-sixties, it was well known that smoking had become a part of the Western industrial style of life and it was growing in the developing countries.

¹*International Encyclopedia of Social Sciences*, (N.Y.: 1968), MacMillan Company and the Free Press, Volume 4, page 299.

²*Ibid.*, pages 299-300.

The average quantity of tobacco used per year by every Canadian above 15 years of age was estimated at 4.630 kilograms. In the U.S.A., it was 4.580 kilos, in Netherland 3.950 kilos, in Switzerland 3.400 kilos, and in the United Kingdom 2.770 kilos. This compares with India, which is one of the highest developing countries in the consumption of tobacco but yet, the average quantity consumed does not exceed 0.820 kilos per every person above 15 years of age.³

In the Muslim countries, smoking was always devalued by religious scholars. In Iran, for example, the prohibition of tobacco issued by *Ulama* constituted an important element in the *Tobacco Protest of 1891-1892*.⁴ And in the Ottoman Empire, the religious forbiddance of tobacco, especially in the "Al-Mathhab al-Hanafi" was behind the institution of the death penalty for smoking.⁵

III — TOBACCO IN AGRICULTURE

Tobacco is one of the most sophisticated plants. It requires above average fertility of the soil and a high rate of labor per acre of which more than half should be trained and skilled. In the United States, the top agricultural land is used for tobacco growing and 1.1. million acres are occupied to produce about one million metric ton of tobacco. This area equals 85% of the area left for potatoes and more than one-fourth of the land in orchards of all fruits together.⁶ The amount of labor applied on one acre of the tobacco plantation is more than one hundred times the labor applied on one acre that produces wheat, seven times the labor needed for one acre with potatoes and 13 times an acre with cotton.⁷

By the same token, 100 pounds of tobacco costs 15

³*Encyclopedia Americana*, International Edition, (N.Y.: American Corporation, 1977) volume 26, page 800.

⁴Nikki R. Keddie: *Religion and Rebellion in Iran: The Tobacco Protest of 1891-1892*, (London: Frank Cass and Company Ltd., 1966).

⁵See "Hashiat Ibn Ahdeen" and *The International Encyclopedia of Social Sciences*, Volume 4, page 299.

⁶*Statistical Abstract of the U.S., 1976*, U.S. Department of Commerce: Bureau of the Census, 1976, Pages 658-660.

⁷*Ibid.*, page 654.

man hours of farming labor alone compared with only 9 seconds for 100 pounds of wheat and 7 seconds for 100 pounds of potatoes.⁸ In monetary terms, one man hour of farm labor produces \$6.80 worth of tobacco while it produces \$10.10 worth of cotton and \$38.80 worth of wheat.⁹ The total labor used in the farming of tobacco in the U.S. in 1975 equals 317.60 million man hours in comparison with 192.06 million man hours used for farming of wheat and 184.00 million man hours for cotton.¹⁰

Knowing that the United States farming industry produces only 18.8% of the world productions (0.995 metric ton in the U.S. compared to 5.292 in the world),¹¹ and that the U.S. farms are highly mechanized with a high capital-labor ratio, one would expect the rest of the world to be using more than proportional quantities of labor and land, but unfortunately, there was no data that could be made available in short time.

IV — TOBACCO: IN INDUSTRY AND TRADE

So much, for the production of raw tobacco. However, in order to present a complete picture of how much is spent on tobacco, the stories of manufacturing, marketing, health care and health research, even the conferences that are held to discuss smoking and its consequences should also be mentioned.¹² But, because of the several limitations, including time, that the author of this paper confesses to have, the rest of it will give a glance on the manufacturing, marketing and consumption before it concludes with the elements of the Islamic theory of prices as applied to the case of tobacco.

The U.S. tobacco manufacturing industry employs 69,000 workers with a yearly payroll of more than half a billion dollars. This is more than one half of the total labor force in the oil and coal productions combined.¹³ The tobacco industry is highly capital intensive, it comes second only to the oil industry in its capital-labor ratio. The average capital invested per employee in the tobacco industry is \$88,900.00, whereas, this capital intensity is only 60,700 in the automobile and 28,200 in the food industry. The total capital invested in the manufacturing of tobacco is 6.1 billion dollars.

⁸*Ibid.*

⁹Average productivity of 1970-1974 and season average prices received by farmers in 1975. Source: *Ibid.*, pages 654 and 659.

¹⁰*Ibid.*

¹¹*United Nations Statistical Yearbook*, 1975, pages 152-155.

¹²For the cost to life, see, for example, W. Wayne Worick: *Alcohol, Tobacco and Drugs*, (Prentice-Hall, Inc., Englewood Cliffs, N.J., 1977), especially pages 87-90.

¹³*Statistical Abstract*, page 769. Figures are for 1973.

This amounts to 40% of the capital invested in the textile industry that provides employment for one million employees, and one-seventh of the total capital invested in the food industry which employees more than one and a half million.¹⁴

The U.S. Federal government prohibits the advertisement for smoking on T.V. and forces the manufacturers to print the famous "cool" advice that smoking is dangerous to health on the package, yet the tobacco manufacturing industry had spent in 1973, \$402 million on advertisement. This amounts to 3.7% of its total receipts. This percentage of advertisement expenditure to total sales is the highest ever as compared to any other industry. It is compared with 1.9% for food, 0.6% for textile and automobile.¹⁵

While consumers spent in 1974, \$13.8 billion on tobacco, only \$10.5 billion of which was received by the manufacturers, the remaining \$3.3 billions were cashed by the advertisement companies, the Federal and State governments and the retail distributors. The government's share in 1975 was 2.3 billion while the farmer's share did not exceed 2.2 billion.

Consumers spend on tobacco more than they spend on each of "education and research," "religious and welfare activities," "gas and domestic service combined," and "personal care." If we add consumers expenditures on tobacco and alcohol together, the total figure is more than half that is spent on clothing, accessories and jewelry.¹⁶

V — TOBACCO IN THE MUSLIM WORLD

The world as a whole devotes 3.92 million hectares for tobacco, about 20% of which is in the Muslim world. Several Muslim countries have huge areas of tobacco plantation. They include Turkey, Indonesia, Bangladesh, and Pakistan. These four countries make up more than three-fourths of the total Muslim land given to tobacco (1975). As for the production, these four countries produce more than half the tobacco produced in the Muslim world. Although the Muslim world provides 19.4% of the total tobacco land in the world, it only produces 11.4%. This shows that the land productivity in the Muslim world is below the world average and it is caused by the lower level of capital invested in the Muslim land both in terms of mechanization and education and training (human capital).¹⁷

On the other hand, the Muslim world is a net exporter of unmanufactured tobacco. Since it

¹⁴*Ibid.*, pages 762-773.

¹⁵*Ibid.*, page 820. This is the latest available data.

¹⁶*Ibid.*, page 396.

¹⁷See Appendix I.

produces some of the finest tobacco leaves that are known (especially in Turkey, Syria, Iraq and Lebanon), its tobacco is highly priced compared with the rest of the world. Therefore, in terms of the value of traded unmanufactured tobacco, the Muslim world was a net exporter of the worth of \$100 million in 1975. Turkey and Indonesia are the leading exporting countries.¹⁸

As for the manufactured tobacco, the Muslim world is a net importer of 7.3% of the total world market.¹⁹

VI — THE VALUE OF TOBACCO

Western economic theory, along with Adam Smith, David Ricardo and Karl Marx, distinguishes between use value and exchange value. The use value of a commodity is considered with respect to the utility it carries to the consumer, it is therefore, subjective. The value in exchange is measured by the amount of money (or other commodities), a certain commodity may be changed for in the market. The Capitalist and Marxian economists do not disagree on the looking at commodities from the point of view of their value in exchange. Even the Utilitarians who emphasize the utility to the consumer as a determinant of value still carry the same "in exchange" spirit in the background of their utility theory.²⁰ The basic premise of the "value in exchange" theory is that a commodity is value, i.e. priced, by the amount it sells for. Therefore, if a market can be created for a commodity, then such a commodity has a value.

The interchangeability of the concepts of "price" and "value" may express one of two alternatives. It

may mean that economics is deprived from any moral judgment, that is any thing that is exchangeable has a value (price) irrespective of the moral load that such a thing may carry. The other meaning that this interchangeability between "value" and "price" may present is that it expresses a moral position, whereby, an object has a moral value because it has an exchange value. The history of economic analysis in the West (whether Marxist or Capitalist) has many instances of these two interpretations.

According to Islam, both of these interpretations seem to be submitting the moral values to the economic pricing. The Islamic alternative is a theory of value that is based on the belief in God and the day of Judgment to which a price theory is a mere subserviant. Allah Subhanahu Wata'ala frequently uses the terms *al-Tayibat* (goods), *al-Khairat* (beneficial things), and *ar-Rizq al-Hasan* (good and beautiful grants) as references to material things and economic commodities. He further attributes their providing to Himself as a sign of mercy and as some of His innumerable bounties. This implies that any subject matter of the price theory should first be valued in order to be priced. Nothing according to the Islamic price theory can be considered an economic commodity unless it carries a moral value, otherwise it is not *Tayibat*, *Khairat*, *Rizq al-Hasan*. This marriage between the economic price theory and the moral values resulted in preventing things that are harmful and consequently prohibited, from being classified as economic commodities, even though they may carry a price in the absence of the moral bondage.

Tobacco is a typical example. If it can be determined that tobacco is harmful to the body, then even it may have a positive price in the non-Godly economy, Islam does not allocate any price to it nor does Islam consider it an object to be owned by Muslims. The Prophet (p.b.u.h.) ordered all alcoholic beverages to be drained away, in spite of the fact that they could be exchanged with the neighboring jews or pagans.

¹⁸See Appendices II and III.

¹⁹Monzer Kahf, "International Trade Patterns of the Muslim Countries," paper presented at the International Economic Conference in London, July 4-9, 1977, Appendix V.

²⁰Paul Samuelson in his interpretation of the utility of the consumer came up with his "revealed preference" thesis. Basically, he argued that if the consumer likes to pay certain prices for a commodity, then it is useful to him.

APPENDIX I
AREA OF CULTIVATION AND PRODUCTION OF
TOBACCO IN THE MUSLIM COUNTRIES

Source: United Nations Statistical Yearbook 1975)

	Area (Thousand Hectar)		Production (Thousand Ton)	
	average 1961-5	1975	average 1961-5	1975
World	3922.7	4388.5	4377.5	5388.2
Muslim Countries				
Algeria	9.6	4.0	5.6	3.0
Benin	2.4	1.4	0.8	0.8
Cameroon	4.2	7.8	2.5	6.0
Central African Republic	1.1	1.7	0.5	1.1
Ethiopia	2.6	4.3	1.3	2.7
Guinea	1.5	1.7	1.2	1.4
Ivory Coast	7.4	9.0	2.2	3.1
Libya	0.9	0.8	1.0	1.1
Mali	0.7	0.2	0.6	0.2
Morocco	1.3	4.1	1.9	4.4
Niger	0.8	0.5	0.3	0.2
Nigeria	18.9	30.7	12.6	14.5
Somalia	0.1	0.2	0.1	0.1
Tanzania	5.9	25.0	3.1	19.1
Togo	4.0	4.0	2.0	2.0
Tunisia	1.3	2.3	1.2	2.7
Uganda	7.4	7.5	—	—
Upper Volta	3.8	1.5	4.5	2.6
Bangladesh	41.8	45.6	28.4	40.6
Indonesia	209.0	177.6	77.6	83.0
Iran	2.7	10.0	18.8	11.0
Iraq	14.4	9.6	9.5	9.6
Jordan	4.6	4.5	1.7	2.0
Lebanon	5.2	7.5	4.8	10.3
Malaysia	3.3	8.5	8.3	8.9
Oman	0.3	0.5	0.2	0.4
Pakistan	44.7	44.1	71.8	61.0
Syria	10.5	23.0	7.6	15.0
Turkey	204.0	389.3	129.9	200.0
A.R. of Yemen	3.4	4.3	2.0	5.0
Democ. Yemen	0.5	0.6	1.2	1.4
Albania	21.2	19.0	11.2	13.8
Total of Muslim Countries	639.5	850.8	414.4	613.4
of the World	16.3%	19.4%	9.5%	11.4%

APPENDIX II
IMPORTS OF UNMANUFACTURED TOBACCO OF THE
MUSLIM COUNTRIES 1971-1975

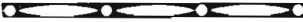
(Source: F.A.O. Trade Yearbook 1975, Rome: F.A.O., Volume 29)

	Quantity (Thousand Ton)		Value (m. U.S. \$)	
	1971	1975	1971	1975
WORLD	1061.6	1329.9	1515.0	2959.0
Algeria	2.8	11.0	2.1	14.0
Benin (Dahomey)	0.6	0.7	0.9	1.4
Cameroon	1.5	1.6	2.0	3.2
Egypt	15.2	25.9	18.5	52.3
Ethiopia	0.2	0.4	0.4	0.9
Gabon	0.1	0.1	0.1	0.3
Gambia	0.2	0.3	0.3	0.5
Guinea Bissau	1.1	0.9	2.8	3.3
Ivory Coast	2.0	1.9	0.9	2.8
Libya	2.8	1.4	5.8	4.2
Mauritania	0.1	0.1	0.1	0.1
Morocco	5.7	6.2	4.0	9.1
Nigeria	1.5	1.7	0.8	1.2
Senegal	0.3	0.7	1.1	2.9
Sierra Leone	1.7	5.7	2.8	2.6
Sudan	—	—	—	0.3
Tanzania	—	—	—	0.2
Tunisia	2.5	6.7	1.4	9.0
Upper Volta	0.6	1.1	0.2	0.9
Bahrain	0.7	0.5	0.3	0.3
Bangladesh	10.0	9.7	15.0	6.8
Indonesia	4.8	15.4	2.0	12.0
Iraq	0.4	0.1	0.6	0.2
Jordan	1.0	0.6	2.9	1.7
Kuwait	0.9	0.5	0.4	0.5
Lebanon	0.2	0.1	0.4	0.4
Malaysia	7.4	9.7	13.0	21.6
Pakistan	1.8	0.3	2.4	0.9
Saudi Arabia	0.9	1.3	0.5	0.8
Syria	0.8	5.0	1.4	21.6
A.R. of Yemen	1.2	2.6	0.3	2.2
Total Muslim Countries	68.8	112.2	82.5	178.2
Percentage of Whole World	6.5	8.4	5.5	6.0

APPENDIX III
EXPORTS OF TOBACCO IN MUSLIM COUNTRIES

(Source: F.A.O. Trade Yearbook 1975, Rome: F.A.O., Volume 29)

	Quantity (Thousand Ton)		Value (m. U.S. \$)	
	1971	1975	1971	1975
WORLD	1024.8	1260.5	1307.4	2580.0
Algeria	0.3	0.3	—	0.1
Benin	0.6	1.0	0.4	0.9
Cameroon	1.9	2.5	1.0	1.8
Central African Republic	0.8	1.1	0.8	1.2
Ivory Coast	—	0.2	—	0.3
Mali	—	0.2	—	0.1
Tanzania	6.6	8.6	8.4	15.9
Tunisia	—	0.2	—	0.1
Uganda	1.5	1.3	3.0	2.2
Bahrain	0.5	0.2	0.2	0.1
Indonesia	22.0	10.0	30.2	35.5
Iraq	1.0	0.3	0.9	0.1
Kuwait	1.8	0.1	0.1	0.1
Lebanon	2.4	6.8	1.9	11.0
Pakistan	30.0	8.2	29.8	8.2
Syria	3.6	4.6	3.7	10.4
Turkey	84.4	65.6	85.9	183.2
Total of Muslim Countries	157.4	109.4	166.3	271.2
Percentage of World	15.4	8.7	12.7	10.5


 "The measure of success is not counted by dollars and cents but by the days and years of mind's peace."
 Al-Tabib

